# PART 70 OPERATING PERMIT and ENHANCED NEW SOURCE REVIEW OFFICE OF AIR MANAGEMENT

## Marble Creations / Foreman Industries, Inc. 2371 Rainbow Road Warsaw, IN 46580

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T085-7628-00051	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

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### **SECTION A**

## **SOURCE SUMMARY**

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

## A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary marble furniture manufacturing plant.

Responsible Official: Michael Foreman

Source Address: 2371 Rainbow Road, Warsaw, IN 46580 Mailing Address: 2371 Rainbow Road, Warsaw, IN 46580

SIC Code: 3088 County Location: Kosciusko

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Rules:

Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) marble casting operation installed in 1994, consisting of:
  - (1) Two (2) open molding gel coat spray booths, identified as S1 and S2, with a combined maximum capacity of 50 pounds per hour of gelcoat and catalyst, utilizing dry filters as particulate control and exhausting to stacks E1 and E2, respectively, and
  - (2) One (1) closed molding casting area, identified as CA1, with a maximum capacity of 678 pounds per hour of resin and catalyst and exhausting within the building.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment,
- (2) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations:

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## A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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## **SECTION B**

## **GENERAL CONDITIONS**

## B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

## B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

## B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

## B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

## B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

## B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

## B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

## B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

## B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
  - (1) Enforcement action;
  - (2) Permit termination, revocation and reissuance, or modification; or
  - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

## B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

## B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

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and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The identification of each term or condition of this permit that is the basis of the certification:
  - (2) The compliance status;
  - (3) Whether compliance was based on continuous or intermittent data;
  - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
  - (5) Any insignificant activity that has been added without a permit revision; and
  - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review (c) and approval by IDEM, OAM.

#### B.13 Emergency Provisions [326 IAC 2-7-16]

- An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - The permitted facility was at the time being properly operated; (2)
  - (3)During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
  - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

Telephone Number: 1-800-451-6027 (ask for Office of Air Management, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5)For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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## B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
  - (1) The applicable requirements are included and specifically identified in this permit; or
  - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
  - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
  - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

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## B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

## B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) An emergency as defined in 326 IAC 2-7-1(12); or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

## B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

## B.18 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
  - (1) A timely renewal application is one that is:
    - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
    - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]
  - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

## B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

## B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

## B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

Marble Creations / Foreman Industries, Inc.

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(a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

## B.22 Operational Flexibility [326 IAC 2-7-20]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any approval required by 326 IAC 2-1 has been obtained;
  - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
  - (1) A brief description of the change within the source;

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- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
  The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

  The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

## B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

## B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]

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- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
- (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

## B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11] Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM, shall reserve the right to issue a new permit.

## B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

## B.27 Enhanced New Source Review [326 IAC 2]

The requirements of the construction permit rules in 326 IAC 2 are satisfied by this permit for any previously unpermitted facilities and facilities to be constructed within eighteen (18) months after the date of issuance of this permit, as listed in Sections A.2 and A.3.

### **SECTION C**

### **SOURCE OPERATION CONDITIONS**

### **Entire Source**

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

## C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

## C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

## C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

### C.6 Operation of Equipment [326 IAC 2-7-6(6)]

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

## C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
  The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4
  and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are
  mandatory for any removal or disturbance of RACM greater than three (3) linear feet on
  pipes or three (3) square feet on any other facility components or a total of at least 0.75
  cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
  The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
  prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
  thoroughly inspect the affected portion of the facility for the presence of asbestos. The
  requirement that the inspector be accredited is federally enforceable.

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## Testing Requirements [326 IAC 2-7-6(1)]

#### Performance Testing [326 IAC 3-6] C.9

All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

All test reports must be received by IDEM, OAM within forty-five (45) days after the (b) completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

#### C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- Has certified that all facilities at this source are in compliance with all applicable (a) requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- Will comply with such applicable requirements that become effective during the term of (c) this permit.

#### Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)] C.11

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification

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of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

## C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

## Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

## C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of

reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

## C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
  - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
  - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
  - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

- (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]
  - (a) When the results of a stack test performed in conformance with Section C -Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
  - (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120)

days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]
  - (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
    - (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
    - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
  - (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

## C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

## C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit.

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(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

## C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## **Stratospheric Ozone Protection**

## C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be

certified by an approved technician certification program pursuant to 40 CFR 82.161.

## **SECTION D.1**

### **FACILITY OPERATION CONDITIONS**

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) marble casting operation installed in 1994, consisting of:
  - (1) Two (2) open molding gel coat spray booths, identified as S1 and S2, with a combined maximum capacity of 50 pounds per hour of gelcoat and catalyst, utilizing dry filters as particulate control and exhausting to stacks E1 and E2, respectively, and
  - One (1) closed molding casting area, identified as CA1, with a maximum capacity of 678 pounds per hour of resin and catalyst and exhausting within the building.

## Emission Limitations and Standards [326 IAC 2-7-5(1)]

## D.1.1 Volatile Organic Compounds [326 IAC 8-1-6]

The use of resins, gel coats, catalysts and clean-up solvents, as well as VOC delivered to the applicators, shall be limited as follows:

- (a) The potential to emit (PTE) VOC from gel coat and catalyst applications from the one (1) marble casting operation shall be limited to less than 25 tons per year, per twelve (12) consecutive months. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and/or resin shall be recorded. VOC emissions shall be calculated by multiplying the usage of each gel coat and/or resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and/or resin, and summing the emissions for all gel coats and/or resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
  - (2) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors for the open molding operations shall be taken from the following reference approved by IDEM, OAM: "CFA Emission Models for the Reinforced Plastics Industries," Composites Fabricators Association, February 28, 1998, or its update, and shall not exceed 28.2% styrene emitted per weight of gel coat applied.
  - (3) The open molding VOC emissions shall be determined by adding the monomer VOC emissions with the non-monomers VOC emissions. The open molding VOC emissions from gelcoat and resin usage shall be determined using the CFA Emission Models for the Reinforced Plastic Industries.
  - (4) Emission factors for the closed molding operations shall be taken from the following reference approved by IDEM, OAM: AP-42, Section 4.4," Polyester Resin Plastics Product Fabrication", and shall not exceed 3.0% styrene emitted per weight of styrene monomer contained in the resin applied.
  - (5) The closed molding operations organic content of the resin shall be multiplied by a emissions factor from AP-42, Section 4.4," Polyester Resin Plastics Product Fabrication" to obtain the VOC emissions.

## D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

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resin and gelcoat from the open molding gel coat spray booth (S1) and the open molding granite spray booth (S2) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E =rate of emission in pounds per hour; and P = process weight rate in tons per hour

## D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for facilities S1 and S2 and associated control devices.

## **Compliance Determination Requirements**

## Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.1 or the PM limit in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

## D.1.5 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

## D.1.6 VOC Emissions

Compliance with Condition D.1.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

#### D.1.7 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the open molding gel coat spray booth (S1) and the open molding granite spray booth (S2) are in operation.

## Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

#### D.1.8 Monitoring

- Daily inspections shall be performed to verify the placement, integrity and particle loading (a) of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the open molding gel coat spray booth (S1) and the open molding granite spray booth (S2) while each of the booths is in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C -Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the overspray emissions from the general

ventilation of the plant and the presence of overspray from both resin and gelcoat spray layup operations on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

## Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

## D.1.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
  - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The cleanup solvent usage for each month;
  - (4) The total VOC usage for each month; and
  - (5) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

## D.1.10 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

## PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Marble Creations / Foreman Industries, Incorporated

Source Address: 2371 Rainbow Road, Warsaw, IN 46580 Mailing Address: 2371 Rainbow Road, Warsaw, IN 46580

Part	70 Permit No.:	T085-7628-00051
	This certification	shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
	Please check wha	at document is being certified:
9	Annual Compliand	ce Certification Letter
9	Test Result (spec	ify)
9	Report (specify)	
9	Notification (speci	fy)
9	Other (specify)	
		n information and belief formed after reasonable inquiry, the statements and ument are true, accurate, and complete.
Sig	nature:	
Prir	nted Name:	
Title	e/Position:	
Dat	e:	

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT

COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

## PART 70 OPERATING PERMIT EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: Marble Creations / Foreman Industries, Incorporated

Source Address: 2371 Rainbow Road, Warsaw, IN 46580 Mailing Address: 2371 Rainbow Road, Warsaw, IN 46580

Part 70 Permit No.: T085-7628-00051

This form consists of 2 pages Page 1 of				
Checl	k eith	ner No. 1 or No.2		
9 1.	Т	his is an emergency as defined in 326 IAC 2-7-1(12)		
	С	The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and		
	С	The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16		
<b>9</b> 2	2. T	his is a deviation, reportable per 326 IAC 2-7-5(3)(c)		
	С	The Permittee must submit notice in writing within ten (10) calendar days		

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

f any of the following are not applicable, mark N/A	Page 2 of 2
Date/Time Emergency/Deviation started:	
Date/Time Emergency/Deviation was corrected:	
Was the facility being properly operated at the time of the emergency/deviation? Describe:	Y N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>X</sub> , CO, Pb, other:	
Estimated amount of pollutant(s) emitted during emergency/deviation:	
Describe the steps taken to mitigate the problem:	
Describe the corrective actions/response steps taken:	
Describe the measures taken to minimize emissions:	
If applicable, describe the reasons why continued operation of the facilities are necessimminent injury to persons, severe damage to equipment, substantial loss of capital loss of product or raw materials of substantial economic value:	
Form Completed by: Title / Position: Date: Phone:	

Phone:

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

	Part 70	Quarterly Report			
Source Name: Marble Creations / Foreman Industries, Incorporated Source Address: 2371 Rainbow Road, Warsaw, IN 46580 Mailing Address: 2371 Rainbow Road, Warsaw, IN 46580 Part 70 Permit No.: T085-7628-00051 Facility: one (1) marble casting operation Parameter: Volatile organic compounds (VOC) Limit: Total emissions of VOC at the one (1) marble casting operation shall be limited less than 25.0 tons per twelve (12) consecutive month period.					
	YEAR	₹:			
	Column 1	Column 2	Column 1 + Column 2		
Month	VOC Emissions This Month (tons)	VOC Emissions Previous 11 Months (tons)	12 Month Total VOC Emissions (tons)		
Month 1					
Month 2					
Month 3					
9 No deviation occurred in this quarter. 9 Deviation/s occurred in this quarter. Deviation has been reported on:  Submitted by: Title / Position: Signature: Date:					

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

## PART 70 OPERATING PERMIT QUARTERLY COMPLIANCE MONITORING REPORT

Source Name: Marble Creations / Foreman Industries, Incorporated Source Address: 2371 Rainbow Road, Warsaw, IN 46580 Mailing Address: 2371 Rainbow Road, Warsaw, IN 46580 Part 70 Permit No.: T085-7628-00051						
M	lonths:	to _	Year:			
This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".						
9 NO DEVIATION	IS OCCURRED THIS	REPO	ORTING PERIOD			
<b>9</b> THE FOLLOWII	NG DEVIATIONS OC	CURR	ED THIS REPORTING PI	ERIO	D.	
	onitoring Requireme nit Condition D.1.8)	nt	Number of Deviations	3	Date of each Deviation	
Title Dat	m Completed By: _e/Position: ee: one:					

Attach a signed certification to complete this report.

## Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for a Part 70 Operating Permit

## **Source Background and Description**

Source Name: Marble Creations / Forman Industries, Incorporated

Source Location: 2371 Rainbow Road, Warsaw, IN 46580

County: Kosciusko

SIC Code: 3088

Operation Permit No.: T085-7628-00051
Permit Reviewer: Phillip Ritz/EVP

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Marble Creations / Forman Industries, Incorporated, relating to the operation of a fiberglass and marble vanities, shower stalls, kitchen tops, window sills, fire-place hearths and assorted products manufacturing plant.

## **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (1) One (1) open molding gel coat spray booth with a maximum capacity of 20 pounds per hour of gelcoat and catalyst, installed in 1988, identified as S1, utilizing dry filters as particulate control and exhausting to stack E1, and
- One (1) closed molding casting area with a maximum capacity of 678 pounds per hour of resin and catalyst, identified as CA1 and exhausting within the building.

## **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units

(1) One (1) open molding granite spray booth with a maximum capacity of 30 pounds per hour of gelcoat, resin and catalyst, installed in 1993, identified as S2, utilizing dry filters as particulate control and exhausting to stack E2.

## New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities to receive prior approval.

## **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:

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- (a) One (1) finishing heater, with a heat input of 0.16 MMBtu per hour,
- (b) One (1) setup heater, with a heat input of 0.16 MMBtu per hour,
- (c) One (1) finishing air makeup, with a heat input of 1.0 MMBtu per hour,
- (d) One (1) mold shop heater, with a heat input of 0.24 MMBtu per hour,
- (e) One (1) gelcoat curing tunnel heater, with a heat input of 0.15 MMBtu per hour, and
- (f) One (1) spray granite heater, with a heat input of 0.2 MMBtu per hour.
- (2) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 Btu/hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000Btu/hour,
- (3) The following VOC and HAP storage containers:
  - (a) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons,
  - (b) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (4) Cleaners and solvent characterized as follows:
  - (a) having a vapor pressure equal to or less than 0.3 psi at 100F or;
  - (b) having a vapor pressure equal to or less than 0. psi at 100F
- (5) The following equipment related to manufacturing activies not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment,
- (6) Infrared cure equipment,
- (7) Any operation using aqueous solution containing less than 1% by weight of VOCs excluding HAPs,
- (8) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment,
- (9) Heat exchanger cleaning and repair,
- (10) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone,
- (11) Paved and unpaved roads with public access,
- (12) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower,
- (13) On-site fire and emergency response training approved by the department, and
- Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

(1) CP 085-4376-00051, issued on July 15, 1995.

All conditions from previous approvals were incorporated into this Part 70 permit.

### **Enforcement Issue**

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

### Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 13, 1996. Additional information was received on January 7, 1999.

A notice of completeness letter was mailed to the source on January 21, 1997.

### **Emission Calculations**

See Appendix A of this document for detailed emissions calculations (Appendix A, pages 1 through 8.)

### **Potential Emissions**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential Emissions (tons/year)			
PM	greater than 100			
PM-10	greater than 100			
SO <sub>2</sub>	less than 100			
VOC	less than 100			
СО	less than 100			
NO <sub>x</sub>	less than 100			

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Styrene	greater than 10
Methyl Methacrylate	less than 10
Methyl Ethyl Ketone	less than 10
Dimethyl Phthalate	less than 10
TOTAL	greater than 25

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of PM10 are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in 326 IAC 1-2-55) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in 326 IAC 1-2-55) of the combination of HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

#### **Fugitive Emissions** (c)

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Potential Emissions for the one (1) open molding granite spray booth, identified as S2

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	64.47
PM-10	64.47
SO <sub>2</sub>	0.00
VOC	18.91
СО	0.00
NO,	0.00

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Styrene	greater than 10
Methly Methacrylates	less than 10
Methyl Ethyl Ketone	less than 10
Dimethyl Pthalate	less than 10
TOTAL	less than 25

- The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or (a) greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) **Fugitive Emissions**

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### **Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 1996 source emission data.

Pollutant	Actual Emissions (tons/year)
PM	
PM-10	
SO <sub>2</sub>	
VOC	9.10
СО	
NO <sub>x</sub>	
HAP (Styrene)	5.6
HAP (MEK)	2.5

### **Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	РМ	PM-10	SO <sub>2</sub>	VOC	СО	NO <sub>x</sub>	Any Single HAP	Total HAPs
Gel Coat Spray Booth (S1)	0.81	0.81	0.00	24.00	0.00	0.00	23.45 (styrene)	23.99
Granite Spray Booth (S2)	1.29	1.29	0.00	18.91	0.00	0.00	12.44 (styrene)	17.92
Casting Area (CA1)	0.00	0.00	0.00	24.00	0.00	0.00	10.48 (styrene)	11.12
*Natural Gas Combustion	0.07	0.07	0.01	0.05	0.81	0.97	0.00	0.00
Insignificant Activities	insig.	insig.	insig.	insig.	insig.	insig.	insig.	insig.
Total Emissions	2.17	2.17	0.01	66.96	0.81	0.97	46.37 (styrene)	53.03

<sup>\*</sup> These activities also qualify as insignificant activities (see Insignificant Activities).

### **County Attainment Status**

The source is located in Kosciusko County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen ( $NO_X$ ) are precursors for the formation of ozone. Therefore, VOC and  $NO_X$  emissions are considered when evaluating the rule applicability relating to the ozone standards. Kosciusko County has been designated as attainment or unclassifiable for ozone.

### **Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

### **Federal Rule Applicability**

- (a) There are no New Source Performance Standards (326 IAC 12) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) applicable to this source.

### State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), this source is not considered a major source because it has the potential to emit less than 250 tons per year of any criteria pollutant and it is not one of the 28 listed source categories. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

### 326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM-10. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

### 326 IAC 6-4 (Fugitive Dust Emissions)

The source shall comply with all regulations under 326 IAC 6-4 (Fugitive Dust Emissions). Fugitive dust shall not be seen crossing the boundary or property line of the plant.

### State Rule Applicability - Individual Facilities

### 326 IAC 2-1-3.4 (New Source Toxics Control)

Pursuant to 326 IAC 2-1-3.4 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The two (2) Open Molding Spray Booths (S1 and S2) and the closed molding casting area (CA1) were constructed before the rule applicability date of July 27, 1997. Therefore, these facilities are not subject to the requirements of 326 IAC 2-1-3.4.

### 326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) overspray from the spray applicators of resin and gelcoat from the open molding gel coat spray booth (S1) and the open molding granite spray booth (S2) shall be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

### 326 IAC 8-1-6 (General Reduction Requirements)

Pursuant to 326 IAC 8-1-6, new facilities located anywhere in the state that were constructed on or after January 1, 1980, which have a potential to emit (PTE) VOC at 25 tons or more per year, and which are not otherwise regulated by another provision of Article 8, are subject to the rule requirements. The one (1) open molding granite spray booth (S2) has potential VOC emissions of less than 25 tons per twelve (12) consecutive month period. The one (1) open molding gel coat spray booth (S1) and the closed molding casting area (CA1) were constructed separately. While each facility has a potential to emit VOC above 25 tons per year, each facility shall be limited to 24 tons per twelve (12) consecutive month period. Therefore the Best Available Control Technology (BACT) requirements under 326 IAC 8-1-6 (General Reduction Requirements) are not applicable to either facility or the source.

### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- (a) The open molding gel coat spray booth (S1) and the open molding granite spray booth (S2) have applicable compliance monitoring conditions as specified below:
  - (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the open molding gel coat spray booth (S1) and the open molding granite spray booth (S2) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
  - (2) Monthly inspections shall be performed of the overspray emissions from the general ventilation of the plant and the presence of overspray from both resin and gelcoat spray layup operations on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
  - (3) The closed molding casting area (CA1) has no applicable compliance monitoring conditions.

These monitoring conditions are necessary because the dry filters for the open molding gel coat spray booth (S1) and the open molding granite spray booth (S2) must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

### **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations. (Appendix A, pages 4 though 7 of 8)

### Conclusion

The operation of this fiberglass and marble vanities, shower stalls, kitchen tops, window sills, fireplace hearths and assorted products manufacturing plant shall be subject to the conditions of the attached proposed **Part 70 Permit No. T085-7628-00051** 

# Indiana Department of Environmental Management Office of Air Management

# Addendum to the Technical Support Document (TSD) for a Part 70 Operating Permit

Source Name: Marble Creations / Foreman Industries, Incorporated

Source Location: 2371 Rainbow Road, Warsaw, IN 46580

County: Kosciusko

Operation Permit No.: T085-7628-00051

SIC Code: 3088

Permit Reviewer: Phillip Ritz/EVP

On April 3, 1999, the Office of Air Management (OAM) had a notice published in the Times Union, Warsaw, Indiana, stating that Marble Creations / Foreman Industries, Incorporated, had applied for a Part 70 Operating Permit to operate a marble vanities, shower stalls, kitchen tops, window sills, fire-place hearths and assorted products manufacturing plant with control. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On May 3, 1999, Rick Farley submitted comments on behalf of Marble Creations / Foreman Industries, Incorporated on the proposed construction permit. The summary of the comments and corresponding responses is as follows:

### Comment 1

References in the Permit and TSD state that the Responsible Official's name is Michael Foreman, President, and our company's name is Foreman Industries, Inc. The cover page, draft permit and TSD reads Forman instead of Foreman. Please change to the correct name in the cover page, through the entire draft permit.

### Response 1

Form GSD-01 incorrectly stated the company name as Marble Creations / Forman Industries, Incorporated. The cover page, draft permit, and headers have been corrected to read Foreman instead of Forman.

### Comment 2

In section A.1, on page 4 of 38 of the permit, Marble Creations requests that the description of the facilities be modified. Please delete the word fiberglass from the sentence. The marble casting operations conducted in this facility do not include the use of fiberglass material.

### Response 2

Form GSD-01 and the existing construction permit CP 085-4376-00051 incorrectly stated that the source's operations included the use of fiberglass material. The word fiberglass has been deleted from Section A.1. The changes to section A.1 are as follows (changes indicated in **bold face** or strikeout):

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates **a** stationary, fiberglass and, marble furniture manufacturing plant.

### Comment 3

In condition A.2, on page 4 of 38 of the permit, we request that the description of two spray booths and mixers (casting area) be changed to indicate "one marble casting operation consisting of two (2) spray booths and four (4) mixers (3 hand operated and 1 automated) with a maximum capacity of 50 lbs/hr and 678 lbs/hr (combined), respectively." We have always considered this equipment as part of one process under the existing equipment.

### Response 3

The emission unit description has been changed to show that the source has one (1) marble casting operation at this source.

# A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1) One (1) open molding gel coat spray booth with a maximum capacity of 20 pounds per hour of gelcoat and catalyst, installed in 1988, identified as S1, utilizing dry filters as particulate control and exhausting to stack E1,
- (2) One (1) open molding granite spray booth with a maximum capacity of 30 pounds per hour of gelcoat, resin and catalyst, installed in 1994, identified as S2, utilizing dry filters as particulate control and exhausting to stack E2, and
- (3) One (1) closed molding casting area with a maximum capacity of 678 pounds per hour of resin and catalyst, identified as CA1 and exhausting within the building.
- (a) One (1) marble casting operation installed in 1994, consisting of:
  - (1) Two (2) open molding gel coat spray booths, identified as S1 and S2, with a combined maximum capacity of 50 pounds per hour of gelcoat and catalyst, utilizing dry filters as particulate control and exhausting to stacks E1 and E2, respectively, and
  - (2) One (1) closed molding casting area, identified as CA1, with a maximum capacity of 678 pounds per hour of resin and catalyst and exhausting within the building.

### Comment 4

In condition B.14, on page 11 of 38 of the permit, the wording of paragraph (b) of this condition is somewhat ambiguous with respect to whether former construction permit conditions, which are not included in this permit, may still be applicable. We would request that the condition be specifically amended to identify the fact that all of the conditions in the previously issued construction and operating permits are superceded by this permit.

### Response 4

This condition is almost exactly the wording required by 326 IAC 2-7-15. OAM agrees that some of the wording should be changed as requested. 40 CFR 70.6(f) states that the permitting authority may expressly include in a Part 70 permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements. OAM believes non-applicable requirement determinations should be dealt within Section D. OAM has also added language dealing with applicable requirements from prior permits.

On July 28, 1998, the OAM was notified that the U.S. EPA would object to any Title V Operating Permit that superceded all previous construction permits. The U.S. EPA indicated that they believed that the authority for certain applicable requirements might expire if the construction permits that established them expired. The OAM believes that the regulatory process is best served if all affected parties are able to rely on the Title V Operating Permit to identify all applicable requirements and the means for demonstrating compliance with each requirement.

The OAM intends to continue discussions with the U.S. EPA regarding the issues related to past construction permits. However the OAM also believes that the Permit Shield condition B.14 (b) (1) & (2) establishes that the Title V permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of the permit shall be deemed in compliance with any applicable requirements as of the date of the permit issuance for all the previous permits identified by the source and the OAM during the course of this review. There will be no changes to this condition in the final permit due to this comment.

### Comment 5

Condition C.14, on page 22 of 38 of the permit, should be removed as there is no requirement in this permit to monitor or record pressure drop from any control device.

### Response 5

Condition C.14 on page 22 of 38 has been deleted from the final permit as follows. The remaining C conditions have been renumbered. The changes to the permit are as follows:

### C 14 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

### Comment 6

In condition C.17 on page 23 of 38 of the permit, we do not believe that 40 CFR Part 70, or 326 IAC 2-7 provides any authority to require the preparation of a Compliance Response Plan (CRP) or to establish the basis for a violation of the permit for failure to conduct the identified response steps. Failure to take specific response steps should not be interpreted in any way as evidence of non-compliance with an underlying applicable requirement, which is implied by this permit condition. We would request that all references to a Compliance Response Plan be eliminated from this condition and other portions of the permit.

### Response 6

IDEM has worked with members of the Clean Air Act Advisory Council's Permit Committee, Indiana Manufacturing Association, Indiana Chamber of Commerce and individual applicants regarding the Preventive Maintenance Plan, the Compliance Monitoring Plan and the Compliance Response Plan. IDEM has clarified the preventive maintenance requirements by working with sources on draft language over the past two years. The plans are fully supported by rules promulgated by the Air Pollution Control Board. The plans are the mechanism each permittee will use to verify continuous compliance with its permit and the applicable rules and will form the basis for each permittee's Annual Compliance Certification. Each permittee's ability to verify continuous compliance with its air pollution control requirements is a central goal of the Part 70 permit program.

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The regulatory authority for and the essential elements of a compliance monitoring plant were clarified in IDEM's Compliance Monitoring Guidance, in May 1996. IDEM originally placed all the preventive maintenance requirements in the permit section titled "Preventive Maintenance Plan." Under that section the permittee's Preventive Maintenance Plan (PMP) had to set out requirements for the inspection and maintenance of equipment both on a routine basis and in response to monitoring. Routine maintenance was a set schedule of inspections and maintenance of the equipment. The second was inspection and maintenance in response to monitoring that showed that the equipment was not operating in its normal range. This monitoring would indicate that maintenance was required to prevent the exceedance of an emission limit or other permit requirement. The maintenance plan was to set out the "corrective actions" that the permittee would take in the event an inspection indicated an "out of specification situation," and also set out the time frame for taking the corrective action. In addition, the PMP had to include a schedule for devising additional corrective actions for out of compliance situations that the source had not predicted in the PMP. All these plans, actions and schedules were part of the Preventive Maintenance Plan, with the purpose of maintaining the permittee's equipment so that an exceedance of an emission limit or violation of other permit requirements could be prevented.

After issuing the first draft Title V permits on public notice in July of 1997, IDEM received comments from members of the regulated community regarding many of the draft permit terms. including the PMP requirements. One suggestion was that the corrective action and related schedule requirements be removed from the PMP requirement and placed into some other requirement in the permit. This suggestion was based, in some part, on the desire that a permittee's maintenance staff handle the routine maintenance of the equipment, and a permittee's environmental compliance and engineering staff handle the compliance monitoring and steps taken in reaction to an indication that the facility required maintenance to prevent an environmental problem.

IDEM carefully considered this suggestion and agreed to separate the "corrective actions" and related schedule requirements from the PMP. These requirements were placed into a separate requirement, which IDEM named the Compliance Response Plan (CRP). In response to another comment, IDEM changed the name of the "corrective actions" to "response steps." That is how the present CRP requirements because separated from the PMP requirement, and acquired their distinctive nomenclature.

Other comment sought clarification on whether the failure to follow the PMP was violation of the permit. The concern was that a permittee's PMP might call for the permittee to have, for example, three "widget" replacement parts in inventory. If one widget was taken from inventory for use in maintenance, then the permittee might be in violation of the PMP, since there were no longer three widgets in inventory, as required by the PMP. Comments also expressed a view that if a maintenance employee was unexpectedly delayed in making the inspection under the PMP's schedule, for example by the employee's sudden illness, another permit violation could occur, even though the equipment was still functioning properly.

IDEM considered the comments and revised the PMP requirement so that if the permittee fails to follow its PMP, a permit violation will occur only of the lack of proper maintenance causes or contributes to a violation of any limitation on emissions or potential to emit. This was also the second basis for separating the compliance maintenance response steps from the PMP and placing them in the Compliance Response Plan (CRP). Unlike the PMP, the permittee must conduct the required monitoring and take any response steps as set out in the CRP (unless otherwise excused) or a permit violation will occur.

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The Compliance Monitoring Plan is made up of the PMP, the CRP, the compliance monitoring and compliance determination requirements in section D of the permit, and the record keeping and reporting requirements in sections C and D. IDEM decided to list all these requirements under this new name, the Compliance Monitoring Plan (CMP), to distinguish them from the PMP requirements. The section D provisions set out which facilities must comply with the CMP requirement. The authority for the CMP provisions is found at 326 IAC 2-7-5(1), 2-7-5(3), 2-7-5(13), 2-7-6(1), 1-6-3 and 1-6-5.

Most permittees already have a plan for conducting preventive maintenance for the emission units and control devices. It is simply a good business practice to have identified the specific personnel whose job duties include inspecting, maintaining and repairing the emission control devices. The emission unit equipment and the emission control equipment may be covered by a written recommendation from the manufacturer set out schedules for the regular inspection and maintenance of the equipment. The permittee will usually have adopted an inspection and maintenance schedule that works for its particular equipment and process in order to keep equipment downtime to a minimum and achieve environmental compliance. The manufacturer may also have indicated, or the permittee may know from experience, what replacement parts should be kept on hand. The permittee may already keep sufficient spare parts on hand so that if a replacement is needed, it can be quickly installed, without a delay in the permittee's business activities and without an environmental violation. For the most part, the PMP can be created by combining present business practices and equipment manufacturer guidance into one document, the Preventive Maintenance Plan (PMP).

The permittee has 90 days to prepare, maintain and implement the PMP. IDEM is not going to draft the PMP. Permittees know their processes and equipment extremely will and are in the best position to draft the PMP. IDEM's air inspectors and permit staff will be available to assist the permittee with any questions about the PMP. IDEM may request a copy of the PMP to review and approve.

The Preventive Maintenance Plan requirement must be included in every applicable Part 70 permit pursuant to 326 IAC 2-7-5(13). This rule refers back to the Preventive Maintenance Plan requirement as described in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3-(a)(1)),
- (2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) The identification and quantification of the replacement parts for the facility which the permittee will maintain in inventory for quick replacement (326 IAC 1-6-3(a)(2)).

It is clear from the structure of the wording in 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3(a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, not any other facility equipment. The commissioner may require changes in the maintenance plan to reduce excessive malfunctions in any control device or combustion or process equipment under 326 IAC 1-6-5.

The CRP requirement of response steps and schedule requirements are another example of documenting procedures most permittees already have developed in the course of good business practices and the prevention of environmental problems. Equipment will often arrive with the manufacturer's trouble shooting guide. It will specify the steps to take when the equipment is not functioning correctly.

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The steps may involve some initial checking of the system to locate the exact cause, and other steps to place the system back into proper working order. Using the trouble shooting guide and the permittee's own experience with the equipment, the steps are taken in order and as scheduled until the problem is fixed.

A permittee will likely already have a procedure to follow when an unforeseen problem situation occurs. The procedure may list the staff to contact in order to select a course of action, or other step, before the equipment problem creates an environmental violation or interrupts the permittee's business process.

The Compliance Monitoring Plan (CMP) is consistent with IDEM's Compliance Monitoring Guidance released in May of 1996. The guidance discusses corrective action plans setting out the steps to take when compliance monitoring shows an out of range reading. Some of the terminology has changed, as a result of the comments from regulated sources, but the requirements in the permit do not conflict with the guidance.

### Comment 7

In Condition C.21 (now C.20), on page 26 of 38 of the permit, paragraph (c) (4) should be deleted from the permit, since the requirements for preventive maintenance plans are already adequately addressed in Condition B.12 (Preventive Maintenance Plans) and the requirements of this paragraph are overly broad and exceed existing regulatory authority.

### Response 7

IDEM acknowledges that the language contained in subsection (c)(4) arose from negotiations on a source specific nature. The language describes the records that would be potentially useful for the source to use under Section B.13, Emergency Provisions. If a permittee cannot demonstrate that an event qualifies as an emergency, then the affirmative defense cannot be claimed.

(4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

### **Comment 8**

Condition D.1, on page 29 of 38 of the permit, all the emission units involved in the marble casting process were installed in 1994. Marble Creations requests the facility description be modified to reflect that the marble casting process and hence its emission units were installed at the same time in 1994. In addition, please see comment #3 about facility description.

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### Response 8

The emission unit identification has been changed to reflect that the entire marble casting process was installed in 1994. The description has been changed to show that the source has one (1) marble casting operation at this source. However, the one marble casting operation consists of one (1) previously permitted booth, identified as S1 (previously identified as SA in CP085-4376-00051); and also consists of Booth S2 and four mixers which were not included in the CP085-4376-00051 application. Construction Permit CP 085-4376-00051 limits the VOC emissions from the source to less than 24 tons per year. The emission units, both permitted and unpermitted, were constructed at the same time in 1994, and are all subject to the 24 ton per year limit.

### Facility Description [326 IAC 2-7-5(15)]

- (1) One (1) open molding gel coat spray booth, installed in 1988, identified as S1, utilizing dry filters as particulate control, exhausting to stack E1, and
- (2) One (1) open molding granite spray booth, installed in 1994, identified as S2, utilizing dry filters as particulate control, exhausting to stack E2.
- (3) One (1) closed molding casting area with a maximum capacity of 678 pounds per hour of resin and catalyst, identified as CA1 and exhausting within the building.
- (a) One (1) marble casting operation installed in 1994, consisting of:
  - (1) Two (2) open molding gel coat spray booths, identified as S1 and S2, with a combined maximum capacity of 50 pounds per hour of gelcoat and catalyst, utilizing dry filters as particulate control and exhausting to stacks E1 and E2, respectively, and
  - (2) One (1) closed molding casting area, identified as CA1, with a maximum capacity of 678 pounds per hour of resin and catalyst and exhausting within the building.

### Comment 9

As mentioned in comment #3, Marble Casting had always considered all of the existing emission units as one marble casting operation. Therefore, we request to group these units as one and to be consistent with the facility-wide VOC emission limit of 24 tpy indicated in the facilities's operating permit (CP 085-4376, dated July 14, 1995). We request this section be modified to reflect this facility-wide limit and that conditions D.1.1 (a) and (b) on page 4 of 38 of the permit be combined.

In addition, we do not believe that it is appropriate to specify an emission factor that is not mandated by an applicable rule or regulation as a permit condition. We therefore request that D.1.1 (a)(2), (a)(3), (b)(2), and (b)(3) be deleted. We believe that the statement in Condition D.1.1 (a)(1) or D.1.1 (b)(1) is sufficient.

Attached is a suggested revision to D.1.1 that incorporates the recommended changes. If Conditions D.1.1(a) and (b) are not amended as requested above:

We request that the proper material utilized in each emission unit be indicated when describing emission calculations methods [Conditions D.1.1(a)(3) and D.1.1(b)(2)]. Spray booths utilize gel coat and catalyst materials while mixers (casting area) utilize resins and catalysts. We request that Conditions D.1.1 (a)(3) and D.1.1(b)(2) be modified.

Condition D.1.1(a)(2) specifies that for "...these emission calculations, monomer resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis" We do not believe that this is correct.

We request that materials that do not contain styrene should not be considered as contributing to styrene emission. We request that condition D.1.1 (a)(2) be modified.

In condition D.1.1(b)(2), the first part of the paragraph reads: "Emission factors for the closed molding operations shall be taken from the following reference approved by IDEM, OAM: AP-42, Section 4.4 "Polyester Resin Plastics Product Fabrication," and shall not exceed 3.0% styrene emitted per weight of resin applied. Based on AP-42, Table 4.4-2 Emission factors for uncontrolled polyester resin product fabrication processes, the emission factor to be used for marble casting operation shall be 1 to 3% (Non Vapor Suppressed Resins) or 1 to 2% (Vapor Suppressed Resins). The table indicates that this number is the weight percent of starting monomer emitted. Therefore, if D.1.1(b)(2) is not deleted from the permit, the paragraph should be modified to indicate that the emission factors for the closed molding operations shall not exceed 3.0% styrene emitted per weight of styrene monomer contained in the resin applied.

Condition D.1.1(b)(3) indicates that in order to obtain the closed molding operations VOC emissions, the resin organic content shall be multiplied by a 3% flash off factor. We request an explanation of the basis for the 3% flash off factor.

### Response 9

The emission unit identification has been changed to reflect that the entire marble casting process was installed in 1994. The description has been changed to show that the source has one (1) marble casting operation at this source. This one marble casting operation consists of one (1) previously permitted booth, identified as S1 (previously identified as SA in CP085-4376-00051). The one marble casting operation also consists of Booth S2 and four mixers which were not included in the CP085-4376-00051 application. Construction Permit CP 085-4376-00051 limits the VOC emissions from the source to less than 24 tons per year. The emission units were constructed at the same time in 1994, and are all subject to the 24 ton per year limit.

Conditions D.1.1 (a) and (b) have been combined to clarify that the source has one (1) marble casting operation.

Condition D.1.1 (a)(2), (a)(3), (b)(2), and (b)(3) were included in the permit to clarify the sources of emissions factors used in determining compliance with the limitation taken to render 326 IAC 8-1-6 (BACT) not applicable.

D.1.1(a)(2) has been modified to remove the statement specifying that "...these emission calculations, monomer resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis".

In order to clarify Condition D.1.1(b)(2), now Condition D.1.1(a)(4), the following changes have been made:

Emission factors for the closed molding operations shall be taken from the following reference approved by IDEM, OAM: AP-42, Section 4.4," Polyester Resin Plastics Product Fabrication", and shall not exceed 3.0% styrene emitted per weight of **styrene monomer contained in the** resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.

Condition D.1.1(b)(3), now Condition D.1.1(a)(5), refers to the closed molding operation. Emission factors for closed molding operations are available in AP-42, Table 4.4-2, as the CFA Emission Models for the Reinforced Plastics Industries provide emission factors only for open molding operations. The flash off factor for this non-vapor suppressed closed molding operation is 3% of the starting resin organic content.

The changes to Condition D.1.1 are as follows:

### D.1.1 Volatile Organic Compounds [326 IAC 8-1-6]

The use of resins, gel coats, catalysts and clean-up solvents, as well as VOC delivered to the applicators, shall be limited as follows:

- (a) The potential to emit (PTE) VOC from gel coat and catalyst applications from the open molding gel coat spray booth, identified as S1, one (1) marble casting operation shall be limited to less than 25 tons per year, per twelve (12) consecutive months. Compliance with this limit shall be determined based upon the following criteria:
  - (1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and/or resin shall be recorded. VOC emissions shall be calculated by multiplying the usage of each gel coat and/or resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and/or resin, and summing the emissions for all gel coats and/or resins. Emission factors shall be obtained from the reference approved by IDEM, OAM.
  - (2) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA- approved form, emission factors for the open molding operations shall be taken from the following reference approved by IDEM, OAM: "CFA Emission Models for the Reinforced Plastics Industries," Composites Fabricators Association, February 28, 1998, or its update, and shall not exceed 28.2% styrene emitted per weight of gel coat applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.
  - (3) The open molding VOC emissions shall be determined by adding the monomer VOC emissions with the non-monomers VOC emissions. The open molding VOC emissions from gelcoat and resin usage shall be determined using the CFA Emission Models for the Reinforced Plastic Industries.
  - (4) Emission factors for the closed molding operations shall be taken from the following reference approved by IDEM, OAM: AP-42, Section 4.4," Polyester Resin Plastics Product Fabrication", and shall not exceed 3.0% styrene emitted per weight of styrene monomer contained in the resin applied.
  - (5) The closed molding operations organic content of the resin shall be multiplied by a emissions factor from AP-42, Section 4.4," Polyester Resin Plastics Product Fabrication" to obtain the VOC emissions.
- (b) The potential to emit (PTE) VOC from resin and catalyst applications from the closed molding casting area, identified as CA1, shall be limited to less than 25 tons per year, per twelve (12) consecutive months. Compliance with this limit shall be determined based upon the following criteria:

- (1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and/or resin shall be recorded. VOC emissions shall be calculated by multiplying the usage of each gel coat and/or resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and/or resin, and summing the emissions for all gel coats and/or resins.

  Emission factors shall be obtained from the reference approved by IDEM, OAM.
- (2) Emission factors for the closed molding operations shall be taken from the following reference approved by IDEM, OAM: AP-42, Section 4.4," Polyester Resin Plastics Product Fabrication", and shall not exceed 3.0% styrene emitted per weight of resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.
  - (3) The closed molding operations organic content of the resin shall be multiplied by a 3% flash off factor to obtain the VOC emissions.
- (c) Any change or modification that would lead to an increase in potential VOC emissions to 25 tons per year at open molding gel coat spray booth S1, open molding granite spray booth S2 or closed molding casting area, shall obtain approval from the Office of Air Management (OAM), as required by 326 IAC 2-1 before such change can occur.
- (d) Compliance with the requirements of this condition shall make the requirements of 326 IAC 8-1-6 (General Reduction Requirements) not applicable to these facilities and the source.

### Comment 10

In condition D.1.1, on page 30 of 38 of the permit, paragraph (c) reads "Any change or modification that would lead to an increase in potential VOC emissions to 25 tons per year at open molding gelcoat spray booth S1, open molding granite spray booth S2 or closed molding casting area, shall obtain approval..." Based on the TSD emission calculations for Spray booth S1 and molding casting area, their potential emissions are already over 25 tpy. We request that this paragraph be deleted.

### Response 10

The emission unit identification has been changed to reflect that the entire marble casting process was installed in 1994. The description has been changed to show that the source has one (1) marble casting operation at this source. This one marble casting operation consists of one (1) previously permitted booth, identified as S1 (previously identified as SA in CP085-4376-00051). The one marble casting operation also consists of Booth S2 and four mixers which were not included in the CP085-4376-00051 application. Construction Permit CP 085-4376-00051 limits the VOC emissions from the source to less than 24 tons per year. The emission units were constructed at the same time in 1994, have potential VOC emissions over 25 tons per year, and are all subject to the VOC limit of 24 tons per year. Therefore, this paragraph (c) of condition D.1.1 has been removed as shown in Response 9.

### Comment 11

In condition D.1.3, on page 30 of 38 of the permit, we would request that this condition be amended to read as follows: "A Preventive Maintenance Plan, in accordance with Section B-Preventive Maintenance Plan, of this permit is required for the particulate control devices used for these emission units."

Permit Reviewer: PR/EVP

We believe that this language is more appropriate as it does not suggest that a preventive maintenance plan is required for the individual emission units themselves, but instead specifies that a preventive maintenance plan is required for the particulate control devices.

### Response 11

Pursuant to 326 IAC 2-7-4(c)(9) (Permit Application), confirmation that the source maintains onsite a preventive maintenance plan as described in 326 IAC 1-6-3, must be included in the permit application. Pursuant to 326 IAC 2-7-5(13) (Permit Content), a provision that requires the source to do all of the following must be included in each Part 70 permit:

- 1) Maintain on-site the preventive maintenance plan as required under 326 IAC 2-7-4(c)(9);
- 2) Implement the preventive maintenance plan; and,
- 3) Forward to the department upon request the preventive maintenance plan.

The requirements in 326 IAC 1-6-1 and 326 IAC 1-6-3 specify that the requirement to maintain a Preventive Maintenance Plan is applicable to any facility that is required to obtain a permit under 326 IAC 2-1-2 (Registration) and 326 IAC 2-1-4 (Operating Permits). IDEM's preventive maintenance plan guidance states that a preventive maintenance plan is required only for:

- the unit emits particulate matter, sulfur dioxide, or volatile organic compounds;
   and
- (b) the unit has existing applicable requirements; and
- (c) the unit is subject to a NSPS or NESHAP (for these units current requirements will satisfy as a compliance monitoring plan); or
- (d) the unit has a control device and the <u>allowable</u> emissions exceed 10 pounds per hour: or
- (e) the unit does not have a control device and has <u>actual</u> emissions exceeding 25 tons per year.

The guidance does not state that if a facility does not meet the above requirements, preventive maintenance will never be necessary, it does state that a preventive maintenance plan is not required to be submitted with the application. In most cases, the requirement to maintain a preventive maintenance plan and perform preventive maintenance has followed the same guidelines as specified above. However, there are some types of operations that the OAM has determined that compliance monitoring and preventive maintenance plans are necessary to ensure continuous compliance.

The Preventive Maintenance Plan is applicable to emission units and control devices. There have been no changes to this condition as a result of this comment.

### **Comment 12**

In conditions D.1.8 and D.1.9, on page 31 of 38 of the permit, the allowable PM emissions from all emission units are all less than 10 lbs/hr, and therefore it is our understanding that IDEM would not require compliance monitoring for these relatively small emission units. We would request the elimination of Conditions D.1.8 and D.1.9(b).

### Response 12

The condition requires surface coating facilities to use dry filters as a control because OAM believes that daily inspections are necessary to ensure compliance with 326 IAC 6-3-2(c) (Particulate Emission Limitations). Therefore, the condition has not been changed. IDEM receives numerous complaints about overspray from this type of facility. The use and monitoring of the filters is necessary to ensure that the facility is operating correctly and that the ambient air quality standards set forth in 326 IAC 1-3 will be attained and/or maintained, and that the public health will be protected, as allowed by 326 IAC 2-1-5(a)(2). No permit change was made as a result of this comment.

Permit Reviewer: PR/EVP

### Comment 13

In condition D.1.9, on page 32 of 38 of the permit, Marble Creations believes that the record keeping of volume weighed VOC content of the coatings used for each month is not necessary for emission tracking. Because this is a reacting chemical system, the VOCs input to the process do not equal the VOCs emitted from the process. Please delete this requirement.

### Response 13

Record keeping of volume weighted VOC content is not necessary to determine compliance with the BACT limitation, therefore this requirement has been removed. The changes to condition D.1.9 of the permit are as follows:

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
  - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The volume weighted VOC content of the coatings used for each month;
  - (4)(3) The cleanup solvent usage for each month;
  - (5)(4) The total VOC usage for each month; and
  - (6)(5) The weight of VOCs emitted for each compliance period.

### Comment 14

In comment #2 we request that Marble Creations facility operations be considered as one (1) marble casting operation consisting of two spray booths and four mixers (casting area). Therefore, Marble Creations requests that only one quarterly report should be submitted and this report should include the VOC emissions from all emission units. We request that page 36 (Part 70 Quarterly Report-One (1) open molding gel coat spray booth, identified as S1) be modified and page 37 (Part 70 Quarterly Report-one (1) closed molding casting area, identified as CA1) be deleted and replaced with a single quarterly report for the marble casting operation.

### Response 14

The facility operations are considered as one marble casting operation which is limited to 24 tons per year to avoid the requirements of 326 IAC 8-1-6 (BACT). Only one Part 70 Quarterly Report is necessary for the operation, and page 36 (Part 70 Quarterly Report-One (1) open molding gel coat spray booth, identified as S1) has been modified to require reporting for the entire marble casting operation and page 37 (Part 70 Quarterly Report-one (1) closed molding casting area, identified as CA1) has been deleted.

Phone:

Permit Reviewer: PR/EVP

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	Marble Creations / F 2371 Rainbow Road 2371 Rainbow Road 7085-7628-00051 one (1) open moldin casting operation Volatile organic com Total emissions of V identified as S1, one	O Quarterly Report  FormanForeman Industries, Inc. d, Warsaw, IN 46580 d, Warsaw, IN 46580 ang gel coat spray booth, identife apounds (VOC) /OC at the one (1) open moldir e (1) marble casting operation e (12) consecutive month period	ied as S1 one (1) marble  ng gel coat spray booth, n shall be limited to less than
	YEAI	R:	
	Column 1	Column 2	Column 1 + Column 2
Month	VOC Emissions This Month (tons)	VOC Emissions Previous 11 Months (tons)	12 Month Total VOC Emissions (tons)
Month 1			
Month 2			
Month 3			
Title	/ Position: ature:	d in this quarter.	

Phone:

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR MANAGEMENT COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Part 70 Permit No.: Facility: Parameter: Limit:	2371 Rainbow Road 2371 Rainbow Road 7085-7628-00051 one (1) closed mold Volatile organic com Total emissions of V CA1, shall be limited period.	Forman Industries, Incorporated d, Warsaw, IN 46580 d, Warsaw, IN 46580 ling casting area, identified as (hounds (VOC) /OC at the one (1) closed mold d to less than 25.0 tons per twe	<del>CA1</del> ing casting area, identified as
	Column 1	<del>Column 2</del>	Column 1 + Column 2
<del>Month</del>	VOC Emissions This Month (tons)	<del>VOC Emissions Previous</del> <del>11 Months (tons)</del>	12 Month Total VOC Emissions (tons)
Month 1			
Month 2			
Month 3			
<del>Title</del>	No deviation occurred  Deviation/s occurred Deviation has been  nitted by: / Position: ature:	<del>d in this quarter.</del>	

Permit Reviewer: PR/EVP

### Comment 15

Based on comment #12, monitoring is not required. Therefore, we request that the Quarterly Compliance Monitoring Report, on page 38 of 38 of the permit be deleted.

### Response 15

The Quarterly Compliance Monitoring Report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. The use and monitoring of dry filters is necessary to ensure that the spray booths are operating correctly and that the ambient air quality standards set forth in 326 IAC 1-3 will be attained and/or maintained, and that the public health will be protected, as allowed by 326 IAC 2-1-5(a)(2). No permit change was made as a result of this comment.

### Comment 16

The Source Background and Description on page 1 of 8 of the TSD, Marble Creations requests that the description of the facility be modified. Please delete the word "fiberglass" from the sentence. The marble casting operations conducted in this facility do not include the use of fiberglass material.

### Response 16

The OAM prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

Form GSD-01 and the existing construction permit CP 085-4376-00051 incorrectly stated that the source's operations included the use of fiberglass material. The word fiberglass has been deleted. The changes are as follows.

The source background and description on page 1 of 8 of the TSD has been revised as follows:

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Marble Creations / FormanForeman Industries, Incorporated, relating to the operation of a fiberglass and marble vanities, shower stalls, kitchen tops, window sills, fire-place hearths and assorted products manufacturing plant.

### Comment 17

On page 1 of 8 of the TSD under Unpermited Emission Units and Pollution Control Equipment, this section lists one open molding granite spray booth, identified as S2 and installed in 1993, as an unpermited emission unit. As mentioned above, Marble Creations has always considered all the emission units involved in the marble casting process as one marble casting operation. We believe that the existing permit (CP085-4376, dated July 14, 1995) pertains to the one marble casting operation, and therefore it includes all emission units used in this process. Marble Creations request this paragraph be modified to reflect that there are no unpermited emission units.

### Response 17

The language used in the permit has been changed to reflect one marble casting operation. The emission unit identification has been changed to reflect that the entire marble casting process was installed in 1994. The description has been changed to show that the source has one (1) marble casting operation at this source. This one marble casting operation consists of one (1) previously permitted booth, identified as S1 (previously identified as SA in CP085-4376-00051).

The one marble casting operation also consists of Booth S2 and four mixers which were not included in the CP085-4376-00051 application and are considered constructed without a permit and operated without a permit pursuant to 326 IAC 2-1. Construction Permit CP 085-4376-00051 limits the VOC emissions from the source to less than 24 tons per year. The emission units were constructed at the same time in 1994, and are all subject to the 24 ton per year limit.

### Comment 18

On page 1 of 8 of the TSD, under New Emission Units and Pollution Control Equipment Receiving Prior Approval, one automated mixer is planned for installation. This mixer is going to displace some of the capacity of the three hand operated mixers. The mixers (four mixers, 3 hand operated and 1 automated) total capacity will still be 678 lbs/hr.

### Response 18

The maximum capacity of the mixing operation will remain at 678 pounds per hour. Therefore, the potential emissions from the mixing operation will not increase. The automated mixer has been added to the New Emission Units and Pollution Control Equipment Receiving Prior Approval in the TSD. The changes to the permit are as follows:

### New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities to receive prior approval.

The application includes information relating to the prior approval for the construction and operation of the following equipment pursuant to 326 IAC 2-7-5(16):

(a) One automated mixer identified as M4, to be added to the existing three (3) mixers (3 hand operated), identified as M1 through M3 in the closed mold casting area. The maximum capacity of the mixers will remain at 678 pounds per hour (combined).

### Comment 19

On page 1 of 8 of the TSD, we request to have these statements removed based on comment #17.

### Response 19

As stated above, Booth S2 is an unpermited facility which has been constructed without a permit and operated without a permit, pursuant to 326 IAC 2-1. There have been no changes to the permit as a result of this comment.

### Comment 20

On page 3 of 8 of the TSD, under Emission Calculations, and on Appendix A, Marble Creations provided the reviewer on March 2, 1999 with the material used in each emission unit for their emission calculations. However, the proper materials utilized in each emission unit were not used to calculate their emissions. Therefore, Marble Creations request that the correct information and the resulting emissions be used to reflect the appropriate source emissions. Please find enclosed the page indicating the information mentioned above.

### Response 20

The emission calculations have been revised to reflect the materials actually used, and to limit the VOC emissions from the entire marble casting operation to 24 tons per year. The updated calculations, are attached as Appendix A to this TSD addendum.

### Comment 21

On page 3 of 8 of the TSD under Potential Emissions, Marble Creations request that this section be modified to reflect the appropriate emissions based on the correct material used in each emission unit. Please, see comment #20.

### Response 21

After revision of the emission calculations, the Potential to Emit table is still representative of the sources Potential Emissions, and does not require modification to reflect the appropriate emissions based on the correct material used in each emission unit. There has been no change to the permit as a result of this comment.

### Comment 22

On page 4 of 8 of the TSD under Potential Emissions, Marble Creations requests this section be deleted based on comment #17.

### Response 22

Booth S2 is not listed on CP085-4376, dated July 14, 1995 as an emission unit, and has not been previously permitted, therefore, this section shall not be deleted. However, the emission calculations have been revised to reflect the materials actually used in booth S2, and the following changes have been made to page 4 of 8 of the TSD under Potential Emissions to reflect the potential emissions of the unit. This section describes the potential emissions from the unpermitted emission units, and does not include the potential emissions from the rest of the source.

### Potential Emissions for the one (1) open molding granite spray booth, identified as S2

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	<del>64.47</del> <b>63.58</b>
PM-10	<del>64.47</del> <b>63.58</b>
SO <sub>2</sub>	0.00
VOC	<del>18.91</del> 11 <b>.65</b>
CO	0.00
NO,	0.00

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
Styrene	greater than 10 less than 10
Methly Methacrylates	less than 10
Methyl Ethyl Ketone	less than 10
Dimethyl Pthalate	less than 10
TOTAL	less than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Potential to emit (as defined in the Indiana Rule) of particulate matter (PM) are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

### Comment 23

On page 5 of 8 of the TSD under Limited Potential to Emit, Marble Creations requests that this section be modified to reflect that the only potential to emit is the 24 tons VOC per year limit on the marble casting operation emissions. Please see comment #9.

### Response 23

The emission unit identification has been changed to reflect that the entire marble casting process was installed in 1994. The description has been changed to show that the source has one (1) marble casting operation at this source. This one marble casting operation consists of one (1) previously permitted booth, identified as S1 (previously identified as SA in CP085-4376-00051). The one marble casting operation also consists of Booth S2 and four mixers which were not included in the CP085-4376-00051 application. Construction Permit CP 085-4376-00051 limits the VOC emissions from the source to less than 24 tons per year. The emission units were constructed at the same time in 1994, and are all subject to the 24 ton per year limit. The changes to the TSD are as follows:

### **Limited Potential to Emit**

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	СО	NO <sub>x</sub>	Any Single HAP	Total HAPs
Gel Coat Spray Booth (S1)—One (1) marble casting operation	0.81 0.66	0.81 0.66	0.80 0.00	<del>24.00</del> <b>24.00</b>	0.80 0.00	0.80 0.00	23.45 (styrene) 14.84 (styrene)	<del>23.99</del> <b>17.10</b>
Granite Spray Booth (S2)	<del>1.29</del>	<del>1.29</del>	0.00	<del>18.91</del>	0.00	0.00	<del>12.44</del> <del>(styrene)</del>	<del>17.92</del>
Casting Area (CA1)	0.00	0.00	0.00	<del>24.00</del>	0.00	0.00	<del>10.48</del> <del>(styrene)</del>	<del>11.12</del>
*Natural Gas Combustion	0.07	0.07	0.01	0.05	0.81	0.97	0.00	0.00
Insignificant Activities	insig.	insig.	insig.	insig.	insig.	insig.	insig.	insig.

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Total Emissions	2.17 0.73	2.17 0.73	0.01 0.01	66.96 <b>24.05</b>	0.81 0.81	<del>0.97</del> <b>0.97</b>	<del>23.45</del> <del>(styrene)</del> 14.84 (styrene)	<del>23.99</del> 17.10
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<sup>\*</sup> These activities also qualify as insignificant activities (see Insignificant Activities).

### Comment 24

On page 6 of 8 of the TSD under Part 70 Permit Conditions, Marble Creations request that part (b) of this paragraph to be modified to exclude monitoring from the statement. Please see comment #12 for D.1.8.

### Response 24

The condition requires surface coating facilities to use dry filters as a control because OAM believes that daily inspections are necessary to ensure compliance with 326 IAC 6-3-2(c) (Particulate Emission Limitations). Therefore, the condition has not been changed. IDEM receives numerous complaints about overspray from this type of facility. The use and monitoring of the filters is necessary to ensure that the facility is operating correctly and that the ambient air quality standards set forth in 326 IAC 1-3 will be attained and/or maintained, and that the public health will be protected, as allowed by 326 IAC 2-1-5(a)(2). No permit change was made as a result of this comment.

### Comment 25

On page 7 of 8 of the TSD under State Rule Applicability, Marble Creations requests to have this paragraph modified. The emission units involved in the marble casting processes were installed at the same time (in 1994). Due to the nature of the casting process, the molding casting units (mixers) could not have been installed on a different date than the spray operations. Please modify this paragraph to indicate that the marble casting operation and its emission units were installed in 1994, and based on CP085-4376, dated July 14, 1995, the VOC potential emissions shall not exceed 24 tons per year.

### Response 25

The emission unit identification has been changed to reflect that the entire marble casting process was installed in 1994. The description has been changed to show that the source has one (1) marble casting operation at this source. This one marble casting operation consists of one (1) previously permitted booth, identified as S1 (previously identified as SA in CP085-4376-00051). The one marble casting operation also consists of Booth S2 and four mixers which were not included in the CP085-4376-00051 application. Construction Permit CP 085-4376-00051 limits the VOC emissions from the source to less than 24 tons per year. The emission units were constructed at the same time in 1994, and are all subject to the 24 ton per year limit.

### Comment 26

On page 8 of 8 of the TSD under Compliance Requirements, Marble Creations requests this section be modified to indicate that compliance monitoring is not required for this process. Please see comment #12.

### Response 26

The condition requires surface coating facilities to use dry filters as a control because OAM believes that daily inspections are necessary to ensure compliance with 326 IAC 6-3-2(c) (Particulate Emission Limitations). Therefore, the condition has not been changed. IDEM receives numerous complaints about overspray from this type of facility. The use and monitoring of the filters is necessary to ensure that the facility is operating correctly and that the ambient air quality standards set forth in 326 IAC 1-3 will be attained and/or maintained, and that the public health will be protected, as allowed by 326 IAC 2-1-5(a)(2). No permit change was made as a result of this comment.

Permit Reviewer: PR/EVP

Page 20 of 20 T085-7628-00051

### Comment 27

On page 8 of 8 of the TSD under Conclusion, Marble Creations request that the word "fiberglass" be deleted from the paragraph. The marble casting operations conducted in this facility do not include the use of fiberglass material.

### Response 27

Form GSD-01 and the existing construction permit CP 085-4376-00051 incorrectly stated that the source's operations included the use of fiberglass material. The word fiberglass has been deleted. The changes to the conclusion section of the TSD are as follows.

The operation of this fiberglass and marble vanities, shower stalls, kitchen tops, window sills, fireplace hearths and assorted products manufacturing plant shall be subject to the conditions of the attached proposed **Part 70 Permit No. T085-7628-00051** 

## Appendix A: Emissions Calculations Emissions Summary

Company Name: Marble Creations/Forman Industries, Inc.

Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580

**Title V:** T085-7628-00051 **Reviewer:** Phillip Ritz/EVP

Appendix A: Emissions Calculations

Page 1 of 8 TSD App A

**Emissions Summary** 

Company Name: Marble Creations/Forman Industries, Inc.

Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580

Title V: T085-7628-00051
Reviewer: Phillip Ritz/EVP
Date: 12/13/96

### **Uncontrolled Potential Emissions (tons/year)**

	Emissions Genera	ating Activity	
Pollutant	Marble Casting	Natural Gas	TOTAL
	Operation (S1, S2, M1 thru M4)	Combustion	
PM	108.29	0.07	108.36
PM10	108.29	0.07	108.36
SO2	0.00	0.01	0.01
NOx	0.00	0.97	0.97
VOC	78.33	0.05	78.38
CO	0.00	0.81	0.81
total HAPs	55.86	0.00	55.86
worst case single HAP	48.42 (styrene)	0.00	48.42 (styrene)

Total emissions based on rated capacity at 8,760 hours/year.

### Controlled Potential Emissions (tons/year)

	Emissions Generat	ing Activity	
Pollutant	Marble Casting	Natural Gas	TOTAL
	Operation (S1, S2, M1 thru M4)	Combustion	
PM	0.66	0.07	0.73
PM10	0.66	0.07	0.73
SO2	0.00	0.01	0.0
NOx	0.00	0.97	0.97
VOC	24.00	0.05	24.05
CO	0.00	0.81	0.8
total HAPs	17.10	0.00	17.10
worst case single HAP	14.84(styrene)	0.00	14.84(styrene

### Appendix A: Emissions Calculations Reinforced Plastics and Composites Booth S1

Page 2 of 8 TSD App A

Company Name: Marble Creations/Forman Industries, Inc. Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580
Title V: T085-7628-00051

Phillip Ritz/EVP Date: 12/13/96

Booth S1 Open Molding Operat	ions										
	Density	Emission Factor%	Gallons per	Units per	Pound VOC	Pounds VOC	Tons of VOC*	PM tons	Percent of	Transfer	Emission Factor%
Material		Styrene	unit	Hour	per hour	per day	per Year	per year	Operation	Efficiency	Styrene
	(lb/gal)	Monomer/VOC							(%)		Monomer/VOC
Catalyst											
Witco Corp. Hipoint 90	9.26	2.00%	0.003085	7.00	0.00	0.10	0.02	0.43	100.00%	50.00%	100.00%
Gelcoat											
Polydyne Gelcoat White	10.26	3.30%	0.278474	7.00	0.66	15.84	2.89	42.35	100.00%	50.00%	100.00%
c-130-N Clear NPG ISO	8.76	28.20%	0.326158	7.00	5.64	135.36	24.70	31.45	100.00%	50.00%	100.00%
Beige NPG GC	10.00	20.90%	0.285714	7.00	4.18	100.32	18.31	34.65	100.00%	50.00%	100.00%
						•				•	
				Totals:	5.64	135.46	24.72	42.78			

	Totals:	5.64	135.46	24.72	42.78
ADD VOCs from other HAPs	+	0.00	0.00	0.00	
Total VOC including VOCs from other HAPs	=	5.64	135.46	24.72	

At a 69.35% annual usage limitation, Federal Potential VOC Emissions will be 24.0 ton/yr, thus the facility will not be subject to 326 IAC 8-1-6.

NA of 3-30% annual usage initiation, reuteral Potential VOL Emissions will be 24-0 tonyr, mus the facility will not be subject to 326 IAC 8-1-6.

Closed molding emission factors are from AP-42 Table 4-4-2 and open molding emission factors are from CFA Emission Models for the Reinforced Plastic Industries.

Catalyst and Gelcoat usage is 100% open molding. Open molding emission factors are from the CFA Emission Models for the Reinforced Plastics Industries.

Potential VOC Pounds per Hour =Density (Ib/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Emission factor

Potential VOC Pounds per Day =Density (Ib/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (24 hrs.1 day) \* Emission factor

Potential VOC Tons per Year = Density (lb/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unithr) \* (8760 hr/yr) \* (1 ton / 2000 lbs) \* Emission factor Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1 - Weight % Volatiles) \* (1 - Transfer efficiency) \* (8760 hr/yr) \* (1 ton / 2000 lbs)

Total = Sum of all worst case coatings and solvents used

Emission Factor Styrene Monomer/VOC (%) = calculated % Styrene flash off from CFA Emission Calculations, or, for those coatings without Styrene, the Weight % Volatiles from MSDS.

### Appendix A: Emissions Calculations Reinforced Plastics and Composites Booth S2

Page 3 of 8 TSD App A

Company Name: Marble Creations/Forman Industries, Inc. Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580

Title V: T085-7628-00051 Reviewer: Phillip Ritz/EVP

Booth S2 Open Molding Operations

Booth S2 Open Molding Operation	ons										
	Density	Emission Factor%	Gallons per	Units per	Pound VOC	Pounds VOC	Tons of VOC*	PM tons	Percent of	Transfer	Emission Factor%
Material		Styrene	unit	Hour	per hour	per day	per Year	per year	Operation	Efficiency	Styrene
	(lb/gal)	Monomer/VOC							(%)		Monomer/VOC
Resin											
Granicoat	11.68	2.70%	0.366928	7.00	0.73	17.50	3.19	57.53	90.00%	50.00%	100.00%
Catalyst											
Witco Corp. Hipoint 90	9.26	2.00%	0.004628	7.00	0.01	0.14	0.03	0.64	100.00%	50.00%	100.00%
Gelcoat											
Polydyne Gelcoat Orange Tooling	8.93	17.80%	0.479923	7.00	0.53	12.82	2.34	5.40	10.00%	50.00%	100.00%
c-130-N Clear NPG ISO	8.76	28.20%	0.489237	7.00	0.85	20.30	3.71	4.72	10.00%	50.00%	100.00%
				Totals:	1.58	37.94	6.92	63.58			

37.94 6.92 63.58 Totals: 1.58 ADD VOCs from other HAPs (Methly Methacrylates) 1.08 25.92 4.73 2.66 63.86 11.65 Total VOC including VOCs from other HAPs

### METHODOLOGY

At a 69.35% annual usage limitation, Federal Potential VOC Emissions will be 24.0 ton/yr, thus the facility will not be subject to 326 IAC 8-1-6.

Closed molding emission factors are from AP-42 Table 4.4-2 and open molding emission factors are from CFA Emission Models for the Reinforced Plastic Industries.

Catalyst and Gelcoat usage is 100% open molding. Open molding emission factors are from the CFA Emission Models for the Reinforced Plastics Industries. 90% of coating operations in Booth S2 use granicoat (resin), 10% use gelcoat.

Potential VOC Pounds per Hour =Density (lb/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Emission factor
Potential VOC Pounds per Day =Density (lb/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (24 hrs / 1 day) \* Emission factor

Potential VOC Tons per Year = Density (lb/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (8760 hr/yr) \* (1 ton / 2000 lbs) \* Emission factor

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1 - Weight % Volatiles) \* (1 - Transfer efficiency) \* (8760 hr/yr) \* (1 ton / 2000 lbs) Total = Sum of all worst case coatings and solvents used

Emission Factor Styrene Monomer/VOC (%) = calculated % Styrene flash off from CFA Emission Calculations, or, for those coatings without Styrene, the Weight % Volatiles from MSDS.

### Appendix A: Emissions Calculations Reinforced Plastics and Composites Casting from Mixers 1, 2, and 3 Closed Molding Operations

Company Name: Marble Creations/Forman Industries, Inc. Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580 Title V: 7085-7628-00051

Reviewer: Phillip Ritz/EVP Date: 12/13/96

o	 	•
	l Closed Moldina	

	Density	Emission Factor%	Gallons per	Units per	Pound VOC	Pounds VOC	Tons of VOC*	PM tons	Percent of	Transfer	Emission Factor%
Material		Styrene	unit	Hour	per hour	per day	per Year	per year	Operation	Efficiency	Styrene
	(lb/gal)	Monomer/VOC				, ,		1 . ,	(%)	,	Monomer/VOC
Resin											
Aropol C 5329	9.18	44.00%	5.835668	7.00	4.95	118.80	21.68	0.00	100.00%	100.00%	3.00%
Aropol 7241T-15	9.23	47.00%	5.804055	7.00	5.29	126.90	23.16	0.00	100.00%	100.00%	3.00%
Polylite (R) 32-145-24	9.51	32.00%	5.633168	7.00	3.60	86.40	15.77	0.00	100.00%	100.00%	3.00%
Polylite (R) 32-153-00	9.51	33.00%	5.633168	7.00	3.71	89.10	16.26	0.00	100.00%	100.00%	3.00%
Catalyst											
Superox (R) 730	9.51	2.00%	0.004507	7.00	0.01	0.14	0.03	0.64	100.00%	50.00%	100.00%
Norox (R) MEKP-9	9.18	2.00%	0.004669	7.00	0.01	0.14	0.03	0.64	100.00%	50.00%	100.00%
				Totale:	5 20	127 04	23.10	0.64			

Casting from Mixer 2 Closed N	olding Opera	ations									
	Density	Emission Factor%	Gallons per	Units per	Pound VOC	Pounds VOC	Tons of VOC*	PM tons	Percent of	Transfer	Emission Factor%
Material		Styrene	unit	Hour	per hour	per day	per Year	per year	Operation	Efficiency	Styrene
	(lb/gal)	Monomer/VOC							(%)		Monomer/VOC
Resin											
Aropol C 5329	9.18	44.00%	1.789605	7.00	1.52	36.43	6.65	0.00	100.00%	100.00%	3.00%
Aropol 7241T-15	9.23	47.00%	1.779910	7.00	1.62	38.92	7.10	0.00	100.00%	100.00%	3.00%
Polylite (R) 32-145-24	9.51	32.00%	1.727505	7.00	1.10	26.50	4.84	0.00	100.00%	100.00%	3.00%
Polylite (R) 32-153-00	9.51	33.00%	1.727505	7.00	1.14	27.32	4.99	0.00	100.00%	100.00%	3.00%
Catalyst											
Superox (R) 730	9.51	2.00%	0.004507	7.00	0.01	0.14	0.03	0.64	100.00%	50.00%	100.00%
Norox (R) MEKP-9	9.18	2.00%	0.004669	7.00	0.01	0.14	0.03	0.64	100.00%	50.00%	100.00%
				Totale:	1.63	39.06	7 13	0.64			

Casting from Mixer 3 Closed Molding Operations

	Density	Emission Factor%	Gallons per	Units per	Pound VOC	Pounds VOC	Tons of VOC*	PM tons	Percent of	Transfer	Emission Factor%
Material		Styrene	unit	Hour	per hour	per day	per Year	per year	Operation	Efficiency	Styrene
	(lb/gal)	Monomer/VOC							(%)		Monomer/VOC
Resin											
Aropol C 5329	9.18	44.00%	2.925615	7.00	2.48	59.56	10.87	0.00	100.00%	100.00%	3.00%
Aropol 7241T-15	9.23	47.00%	2.909766	7.00	2.65	63.62	11.61	0.00	100.00%	100.00%	3.00%
Polylite (R) 32-145-24	9.51	32.00%	2.824095	7.00	1.80	43.32	7.91	0.00	100.00%	100.00%	3.00%
Polylite (R) 32-153-00	9.51	33.00%	2.824095	7.00	1.86	44.67	8.15	0.00	100.00%	100.00%	3.00%
Catalyst											
Superox (R) 730	9.51	2.00%	0.004507	7.00	0.01	0.14	0.03	0.64	100.00%	50.00%	100.00%
Norox (R) MEKP-9	9.18	2.00%	0.004669	7.00	0.01	0.14	0.03	0.64	100.00%	50.00%	100.00%
	•					•				•	
				Totals:	2.66	63.76	11.64	0.64			

Totals: 9.58

11.64 0.64 41.95

1.93

ADD VOCs from other HAPs

229.87 0.00 0.00 0.00 9.58 229.87 41.95

Total VOC including VOCs from other HAPs

State Potential Emissions for the one marbl	e casting operation	(uncontrolle	ed):	17.88	429.19	78.33	108.29	
	Madadalliana	OtI	Γ#:-:	O-strelled	0	0	Otll-d	
	Material Usage Control Efficiency			Controlled	Controlled	Controlled	Controlled	
	Limitation	VOC	PM	VOC Pounds	VOC Pounds	VOC Tons	PM tons	
	(%)			per Hour	per Day	per Year	per Year	
Total Federal Potential Emissions:								]
for the one marble casting operation	69.36%	0.00%	98.00%	5.48	131.51	24.00	0.66	

### METHODOLOGY

At a 69.35% annual usage limitation, Federal Potential VOC Emissions will be 24.0 ton/yr, thus the facility will not be subject to 326 IAC 8-1-6.

Potential VOC Pounds per Hour =Density ((b/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Emission factor

Potential VOC Pounds per Day =Density ((b/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (24 hrs / 1 day) \* Emission factor

Potential VOC Tons per Year = Density ((b/gal)\* Weight % Monomer \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (8760 hr/yr) \* (1 ton / 2000 lbs) \* Emission factor

Particulate Potential Tons per Year \* (units/hour) \* (gal/unit) \* (lbs/gal) \* (1 - Weight % Volatiles) \* (1 - Transfer efficiency) \* (8760 hr/yr) \* (1 ton / 2000 lbs) Total = Sum of all worst case coatings and solvents used

Emission Factor Styrene Monomer/VOC (%) = calculated % Styrene flash off from CFA Emission Calculations, or, for those coatings without Styrene, the Weight % Volatiles from MSDS. Closed Molding Casting capacity is determined by the throughput of the mixers feeding the casting operation. Emissions result from casting, not mixing.

### Appendix A: Emission Calculations HAP Emission Calculations

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Company Name: Marble Creations/Forman Industries, Inc.
Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580
Title V: T085-7628-00051

Reviewer: Phillip Ritz/EVP
Date: 12/13/96

				Percentage of	Emission Factor%								
Material	Density	Gallons of Material	Maximum		Styrene	Percent	Percent	Weight %	Weight %	Styrene	Methyl	Methyl Ethyl	Dime
	(Lb/Gal)	(gal/unit)	(unit/hour)	Operation	Monomer/VOC	Styrene %	Methyl	Methyl Ethyl	Dimethyl		Methacrylates	Keytone	Pthal
							Methacrylates	Keytone	Pthalate	(ton/yr)	(ton/yr)	(ton/yr)	(ton/
Mixer 1 Resin													
Aropol C 5329	9.18	3.140000	5.835668	100%	3.00%	44.00%				9.73	0.00	0.00	_
Aropol 7241T-15	9.23	3.140000	5.804055	100%	3.00%	47.00%				10.39	0.00	0.00	_
Polylite (R) 32-145-24	9.51	3.140000	5.633168	100%	3.00%	32.00%				7.07	0.00	0.00	
Polylite (R) 32-153-00	9.51	3.140000	5.633168	100%	3.00%	33.00%				7.29	0.00	0.00	
Catalyst										0.00	0.00	0.00	
Superox (R) 730	9.51	0.003004	7.00	100%	100.00%			2.00%	62.00%	0.00	0.00	0.02	
Norox (R) MEKP-9	9.18	0.003112	7.00	100%	100.00%			2.00%	43.00%	0.00	0.00	0.02	
										0.00	0.00	0.00	
Mixer 2 Resin										0.00	0.00	0.00	
Aropol C 5329	9.18	3.140000	1.789605	100%	3.00%	44.00%				2.98	0.00	0.00	
Aropol 7241T-15	9.23	3.140000	1.779910	100%	3.00%	47.00%				3.19	0.00	0.00	
Polylite (R) 32-145-24	9.51	3.140000	1.727505	100%	3.00%	32.00%				2.17	0.00	0.00	
Polylite (R) 32-153-00	9.51	3.140000	1.727505	100%	3.00%	33.00%				2.24	0.00	0.00	
Catalyst										0.00	0.00	0.00	
Superox (R) 730	9.51	0.003004	7.00	100%	100.00%			2.00%	62.00%	0.00	0.00	0.02	
Norox (R) MEKP-9	9.18	0.003112	7.00	100%	100.00%			2.00%	43.00%	0.00	0.00	0.02	
										0.00	0.00	0.00	
Mixer 3 Resin										0.00	0.00	0.00	
Aropol C 5329	9.18	3.140000	2.925615	100%	3.00%	44.00%				4.88	0.00	0.00	
Aropol 7241T-15	9.23	3.140000	2.909766	100%	3.00%	47.00%				5.21	0.00	0.00	
Polylite (R) 32-145-24	9.51	3.140000	2.824095	100%	3.00%	32.00%				3.55	0.00	0.00	
Polylite (R) 32-153-00	9.51	3.140000	2.824095	100%	3.00%	33.00%				3.66	0.00	0.00	
Catalyst										0.00	0.00	0.00	
Superox (R) 730	9.51	0.003004	7.00	100%	100.00%			2.00%	62.00%	0.00	0.00	0.02	
Norox (R) MEKP-9	9.18	0.003112	7.00	100%	100.00%			2.00%	43.00%	0.00	0.00	0.02	

* Total Worst Case Potential Emissions from Closed Molding					18.12	0.00	0.05	1.63
			% Usage Limit	ation				
**Limited HAP Emission	ons		69.36%		5.55	0.00	0.02	0.50

### METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs Emission Factor Styrene Monomer/VOC (%) = calculated % Styrene flash off from CFA Emission Calculations
Resin usage is 80% closed molding and 20% open molding. Closed molding emission factors are from AP-42 Table 4.4-2 and open molding emission factors are from CFA Emission Models for the Reinforced Plastic Industries.

Catalyst and Gelcoat usage is 100% open molding. Open molding emission factors are from the CFA Emission Models for the Reinforced Plastics Industries.

\*HAP Emission Usage Limitation Results from VOC Limitation to avoid 326 IAC 8-1-6 (BACT).

\*Coating application is mutually exclusive, therefore the worst case HAP is used for calculations.

Closed Molding Casting capacity is determined by the throughput of the mixers feeding the casting operation. Emissions result from casting, not mixing.

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## Appendix A: Emission Calculations HAP Emission Calculations for Booth S1

Company Name: Marble Creations/Forman Industries, Inc. Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580
Title V: T085-7628-00051

Reviewer: Phillip Ritz/EVP

Date: 12/13/96

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Percentage of Operation	Emission Factor% Styrene Monomer/VOC	Weight % Styrene	Weight % Methyl Methacrylates	Weight % Methyl Ethyl Keytone	Weight % Dimethyl Pthalate	Styrene (ton/yr)	Methyl Methacrylates (ton/yr)	Methyl Ethyl Keytone (ton/yr)	Dimethyl Pthalate (ton/yr)
Catalyst										0.00	0.00	0.00	0.00
Witco Corp. Hipoint 90	9.26	0.003085	7.00	100%	100.00%				47.00%	0.00	0.00	0.00	0.41
Gelcoat										0.00	0.00	0.00	0.00
Polydyne Gelcoat White	10.26	0.278474	7.00	100%	100.00%	3.30%				2.89	0.00	0.00	0.00
c-130-N Clear NPG ISO	8.76	0.326158	7.00	100%	100.00%	28.20%				24.70	0.00	0.00	0.00
Beige NPG GC	10.00	0.285714	7.00	100%	100.00%	20.90%				18.31	0.00	0.00	0.00
					* Total Worst Case	Potential Emis	sions from Oper	n Molding		24.70	0.00	0.00	0.41
								% Usage Limit	ation				
					**Limited HAP Emis	sions		69.36%		7.57	0.00	0.00	0.13

### METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

Emission Factor Styrene Monomer/VOC (%) = calculated % Styrene flash off from CFA Emission Calculations
Resin usage is 80% closed molding and 20% open molding. Closed molding emission factors are from AP-42 Table 4.4-2 and open molding emission factors are from CFA Emission Models for the Reinforced Plastic Industries.

Catalyst and Gelcoat usage is 100% open molding. Open molding emission factors are from the CFA Emission Models for the Reinforced Plastics Industries.

"HAP Emission Usage Limitation Results from VOC Limitation to avoid 326 IAC 8-1-6 (BACT).

"Coating application is mutually exclusive, therefore the worst case HAP is used for calculations.

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### Appendix A: Emission Calculations HAP Emission Calculations for Booth S2

Company Name: Marble Creations/Forman Industries, Inc. Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580
Title V: To85-7628-00051
Reviewer: Phillip Ritz/EVP
Date: 12/13/96

Booth 2 Open Molding Operations

Booth 2 Open Molding Op	erations												
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Percentage of Operation	Emission Factor% Styrene Monomer/VOC	Weight % Styrene	Weight % Methyl Methacrylates	Weight % Methyl Ethyl Keytone	Weight % Dimethyl Pthalate	Styrene (ton/yr)	Methyl Methacrylates (ton/yr)	Methyl Ethyl Keytone (ton/yr)	Dimethyl Pthalate (ton/yr)
Resin													
Granicoat	11.68	0.366928	7.00	90%	100.00%	1.60%	4.00%			1.89	4.73	0.00	0.00
Catalyst										0.00	0.00	0.00	0.00
Witco Corp. Hipoint 90	9.26	0.004628	7.00	100%	100.00%				47.00%	0.00	0.00	0.00	0.62
Gelcoat										0.00	0.00	0.00	0.00
Polydyne Gelcoat Orange Tooling	8.93	0.479923	7.00	10%	100.00%	17.80%				2.34	0.00	0.00	0.00
c-130-N Clear NPG ISO	8.76	0.489237	7.00	10%	100.00%	28.20%				3.71	0.00	0.00	0.00
* Total Worst Case Potential Emissions from Open Molding 5.60 4.73 0.00 0.65									0.62				
					**Limited HAP Emis			_	ation	4.70	4.45	0.00	0.40
					Limited HAP Emis	SIONS		69.36%		1.72	1.45	0.00	0.19

Total State Potential Emissions for Source:	48.42	4.73	0.05	2.66
				55.86
	Limited	Limited	Limited	Limited
	Emissions	Emissions	Emissions	Emissions
	Styrene	Methyl	Methyl Ethyl	Dimethyl
		Methacrylates	Keytone	Pthalate
imited Emissions for Source:	14.84	1.45	0.02	0.81

### METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* Weight % HAP \* 8760 hrs/yr \* 1 ton/2000 lbs

Emission Factor Styrene Monomer/VOC (%) = calculated % Styrene flash off from CFA Emission Calculations

Resin usage is 80% closed molding and 20% open molding. Closed molding emission factors are from AP-42 Table 4.4-2 and open molding emission factors are from CFA Emission Models for the Reinforced Plastic Industries.

Catalyst and Gelcoat usage is 100% open molding. Open molding emission factors are from the CFA Emission Models for the Reinforced Plastics Industries.

17.12

<sup>\*\*</sup>HAP Emission Usage Limitation Results from VOC Limitation to avoid 326 IAC 8-1-6 (BACT).
\*Coating application is mutually exclusive, therefore the worst case HAP is used for calculations.

## Appendix A: Emission Calculations Natural Gas Combustion

MM Btu/hr 0.3 - < 100

Company Name: Marble Creations/Forman Industries, Inc. Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580

CP: T085-7628-00051

Appendix A: Emission Calculations
Natural Gas Combustion
MM Btu/hr 0.3 - < 100

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Company Name: Marble Creations/Forman Industries, Inc. Address City IN Zip: 2371 Rainbow Road, Warsaw, IN, 46580

CP: T085-7628-00051

Reviewer: Phillip Ritz/EVP

**Date:** 12/13/96

Heat Input Capacity Potential Throughput MMBtu/hr MMCF/yr

2.2

Heat Input Capacity includes:

one (1) hanging gas furnace- 0.3 MMBtu

two (2) heaters- 0.32 MMBtu total

one (1) air make up unit- 1.0 MMBtu

one (1) heater - 0.24 MMBtu

one (1) heater- 0.15 MMBtu

one (1) heater- 0 .2 MMBtu

	Pollutant							
	PM	PM10	SO2	NOx	VOC	CO		
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0		
Potential Emission in tons/yr	0.07	0.07	0.01	0.97	0.05	0.81		

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 50, Flue gas recirculation = 32

All PM is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors may be used to estimate PM10, PM2.5, and PM1 emissions.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1 and 1.4-2, SCC #1-01-006-02, #1-02-006-02, #1-03-006-02, #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

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